

continuing population shifts to the more pest-prone sunbelt States should increase the number of households in need of pest control.

Earnings

The hierarchy of pest controller positions also applies to earnings. Pest control supervisors usually earn the most and technicians the least, with earnings of certified applicators falling somewhere in between. Earnings data do not distinguish among job titles, however.

Median hourly earnings of full-time wage and salary pest controllers in 1998 were \$10.81. The middle 50 percent earned between \$8.80 and \$13.02. The lowest 10 percent earned less than \$6.68, and the top 10 percent earned over \$15.67.

Many pest controllers work under a wage-plus commission system, which rewards workers who do their job well. Some firms offer bonuses to workers who exceed their performance goals.

Related Occupations

Pest controllers visit homes and places of business to provide building services. Other building services workers include construction equipment and materials salespeople, building cleaning personnel, electricians, carpenters, and heating, air-conditioning, and refrigeration technicians.

Sources of Additional Information

Private employment agencies and State employment services offices have information about available job opportunities for pest controllers.

For information about the training and certification required in your State, contact your local office of the U.S. Department of Agriculture or your State's Environmental Protection Agency.

For general information about a career in pest control, contact:

☛ National Pest Control Association, 8100 Oak St., Dunn Loring, VA 22027. Internet: <http://www.pestworld.org>

Food Preparation and Beverage Service Occupations

Chefs, Cooks, and Other Kitchen Workers

(O*NET 65021, 65026, 65028, 65032, 65035, 65038A, 65038B, and 69999E)

Significant Points

- Many young people work as chefs, cooks, and other kitchen workers—over 20 percent are between 16 and 19 years old.
- About 35 percent work part-time.
- Job openings are expected to be plentiful through 2008, reflecting average growth and substantial turnover in this large occupation.

Nature of the Work

A reputation for serving good food is essential to the success of any restaurant or hotel, whether it offers exotic cuisine or hamburgers. Chefs, cooks, and other kitchen workers are largely responsible for establishing and maintaining this reputation. Chefs and cooks do this by preparing meals, while other kitchen workers assist them by cleaning surfaces, peeling vegetable, and performing other duties.

In general, *chefs* and *cooks* measure, mix, and cook ingredients according to recipes. In the course of their work they use a variety of pots, pans, cutlery, and other equipment, including ovens, broilers, grills, slicers, grinders, and blenders. Chefs and cooks are often responsible for directing the work of other kitchen workers, estimating food requirements, and ordering food supplies. Some chefs and cooks also help plan meals and develop menus. Although the terms chef and cook are still used interchangeably, chefs tend to be more highly skilled and better trained than most cooks. Due to their skillful preparation of traditional dishes and refreshing twists in creating new ones, many chefs have earned fame for both themselves and the establishments where they work.

The specific responsibilities of chefs and cooks are determined by a number of factors, including the type of restaurant in which they work. *Institutional chefs and cooks*, for example, work in the kitchens of schools, cafeterias, businesses, hospitals, and other institutions. For each meal, they prepare a large quantity of a limited number of entrees, vegetables, and desserts. *Restaurant chefs and cooks* usually prepare a wider selection of dishes, cooking most orders individually. *Short-order cooks* prepare foods in restaurants and coffee shops that emphasize fast service. They grill and garnish hamburgers, prepare sandwiches, fry eggs, and cook french fries, often working on several orders

at the same time. *Specialty fast-food cooks* prepare a limited selection of menu items in fast-food restaurants. They cook and package batches of food, such as hamburgers and fried chicken, which are prepared to order or kept warm until sold.

Bread and pastry bakers, called pastry chefs in some kitchens, produce baked goods for restaurants, institutions, and retail bakery shops. Unlike bakers who work in large, automated industrial bakeries, bread and pastry bakers need only to supply the customers who visit their establishment. They bake small quantities of breads, rolls, pastries, pies, and cakes, doing most of the work by hand. These bakers measure and mix ingredients, shape and bake the dough, and apply fillings and decorations. Some related workers are employed in coffee houses, which may also serve pastries or other snacks. These workers operate specialized equipment such as cappuccino and espresso machines. Some food products are made on the premises, while others are delivered daily.

Other kitchen workers, under the direction of chefs and cooks, perform tasks requiring less skill. They weigh and measure ingredients, go after pots and pans, and stir and strain soups and sauces. These workers also clean, peel, and slice vegetables and fruits and make salads. They may cut and grind meats, poultry, and seafood in preparation for cooking. Their responsibilities also include cleaning work areas, equipment, utensils, dishes, and silverware.

The number and types of workers employed in kitchens depends on the type of establishment. For example, fast-food outlets offer only a few items, which are prepared by fast-food cooks. Small, full-service restaurants offering casual dining often feature a limited number of easy-to-prepare items supplemented by short-order specialties and ready-made desserts. Typically, one cook prepares all the food with the help of a short-order cook and one or two other kitchen workers.

Large eating places tend to have varied menus and employ kitchen workers who prepare much more of the food they serve from scratch. Kitchen staffs often include several chefs and cooks, sometimes called assistant or apprentice chefs and cooks; a bread and pastry baker; and many less-skilled kitchen workers. Each chef or cook usually has a special assignment and often a special job title—vegetable, fry, or sauce cook, for example. Executive chefs coordinate the work of the kitchen staff and often direct the preparation of certain foods. They decide the size of servings, plan menus, and buy food supplies.

Working Conditions

Many restaurant and institutional kitchens have modern equipment, convenient work areas, and air-conditioning, but many kitchens in older and smaller eating places are not as well equipped. Working conditions depend on the type and quantity of food being prepared and the local laws governing food service operations. Workers usually must withstand the pressure and strain of working in close quarters, standing for hours at a time, lifting heavy pots and kettles, and working



Job openings are expected to be plentiful for chefs, cooks, and other kitchen workers.

near hot ovens and grills. Job hazards include slips and falls, cuts, and burns, but injuries are seldom serious.

Work hours in restaurants may include early mornings, late evenings, holidays, and weekends. Work schedules of chefs, cooks and other kitchen workers in factory and school cafeterias may be more regular. Nearly 1 in 3 cooks and 2 out of 5 other kitchen and food preparation workers work part time, compared to 1 out of 6 workers throughout the economy.

The wide range in dining hours creates work opportunities attractive to homemakers, students, and other individuals seeking supplemental income. For example, over 20 percent of kitchen and food preparation workers are 16-19 years old. Kitchen workers employed by public and private schools may work during the school year only, usually for 9 or 10 months. Similarly, establishments at vacation resorts usually only offer seasonal employment.

Employment

Chefs, cooks, and other kitchen workers held more than 3.3 million jobs in 1998. Restaurant cooks held 783,000 of these jobs; short-order and fast-food cooks, 677,000; institutional cooks, 418,000; bread and pastry bakers, 171,000; and other kitchen workers, 1,256,000.

About three-fifths of all chefs, cooks, and other kitchen workers were employed in restaurants and other retail eating and drinking places. One-fifth worked in institutions such as schools, universities, hospitals, and nursing homes. Grocery stores, hotels, and other organizations employed the remainder.

Training, Other Qualifications, and Advancement

Most chefs, cooks, and other kitchen workers start as fast-food or short-order cooks or in another lower-skilled kitchen position. These positions require little education or training, and most skills are learned on the job. After acquiring some basic food handling, preparation, and cooking skills, these workers may be able to advance to an assistant cook or short-order cook position.

Although a high school diploma is not required for beginning jobs, it is recommended for those planning a career as a cook or chef. High school or vocational school courses in business arithmetic and business administration are particularly helpful. Many school districts, in cooperation with State departments of education, provide on-the-job training and summer workshops for cafeteria kitchen workers with aspirations of becoming cooks. Large corporations in the food service and entertainment industries also offer paid internships and summer jobs, which can provide valuable experience.

To achieve the level of skill required of an executive chef or cook in a fine restaurant, many years of training and experience are necessary. An

increasing number of chefs and cooks obtain their training through high school, post-high school vocational programs, or 2- or 4-year colleges. Chefs and cooks also may be trained in apprenticeship programs offered by professional culinary institutes, industry associations, and trade unions. An example is the 3-year apprenticeship program administered by local chapters of the American Culinary Federation in cooperation with local employers and junior colleges or vocational education institutions. In addition, some large hotels and restaurants operate their own training programs for cooks and chefs.

People who have had courses in commercial food preparation may be able to start in a cook or chef job without having to spend time in a lower-skilled kitchen job. Their education may give them an advantage when looking for jobs in better restaurants and hotels, where hiring standards often are high. Although some vocational programs in high schools offer training, employers usually prefer training given by trade schools, vocational centers, colleges, professional associations, or trade unions. Postsecondary courses range from a few months to 2 years or more and are open in some cases only to high school graduates. The Armed Forces are also a good source of training and experience.

Although curricula may vary, students in these programs usually spend most of their time learning to prepare food through actual practice. They learn to bake, broil, and otherwise prepare food, and to use and care for kitchen equipment. Training programs often include courses in menu planning, determination of portion size, food cost control, purchasing food supplies in quantity, selection and storage of food, and use of leftover food to minimize waste. Students also learn hotel and restaurant sanitation and public health rules for handling food. Training in supervisory and management skills sometimes is emphasized in courses offered by private vocational schools, professional associations, and university programs.

About 700 schools offer culinary courses across the Nation. The American Culinary Federation accredited about 100 training programs and a number of apprenticeship programs in 1998. Typical apprenticeships last three years and combine classroom and work experience. Accreditation is an indication that a culinary program meets recognized standards regarding course content, facilities, and quality of instruction. The American Culinary Federation also certifies pastry professionals, culinary educators, and chefs and cooks at the levels of cook, working chef, executive chef, and master chef. Certification standards are based primarily on experience and formal training.

Important characteristics for chefs, cooks, and other kitchen workers include the ability to work as part of a team, a keen sense of taste and smell, and personal cleanliness. Most States require health certificates indicating workers are free from communicable diseases.

Advancement opportunities for chefs and cooks are better than for most other food and beverage preparation and service occupations. Many chefs and cooks acquire high-paying positions and new cooking skills by moving from one job to another. Besides culinary skills, advancement also depends on ability to supervise less-skilled workers and limit food costs by minimizing waste and accurately anticipating the amount of perishable supplies needed. Some chefs and cooks go into business as caterers or restaurant owners, while others become instructors in vocational programs in high schools, community colleges, or other academic institutions. A number of cooks and chefs advance to executive chef positions or supervisory or management positions, particularly in hotels, clubs, and larger, more elegant restaurants. (For information on *executive chefs*, see the *Handbook* statement on restaurant and food service managers.)

Job Outlook

Job openings for chefs, cooks, and other kitchen workers are expected to be plentiful through 2008. While job growth will create new positions, the overwhelming majority of job openings will stem from the need to replace workers who leave their jobs. Minimal educational and training requirements, combined with a large number of part-time positions, make employment as chefs, cooks, and other kitchen workers attractive to people seeking a short-term

source of income and a flexible schedule. In coming years, these workers will continue to transfer to other occupations or stop working to assume household responsibilities or to attend school full time, creating numerous openings for those entering the field.

These openings will be supplemented by new openings resulting from employment growth, as overall employment of chefs, cooks, and other kitchen workers is expected to increase about as fast as the average for all occupations through 2008. Employment growth will be spurred by increases in population, household income, and leisure time that will allow people to dine out and take vacations more often. In addition, growth in the number of two-income households will lead more families to opt for the convenience of dining out.

Projected employment growth varies by specialty. Increases in the number of families and the more affluent, 55-and-older population will lead to a growing number of restaurants that offer table service and more varied menus—requiring higher-skilled cooks and chefs. Also, the popularity of fresh baked breads and pastries should ensure continued rapid growth in the employment of bakers. Employment of short-order and specialty fast-food cooks, most of whom work in fast-food restaurants, also is expected to increase in response to growth of the 16-24 year-old population and the continuing fast-paced lifestyle of many Americans.

Employment of institutional and cafeteria chefs and cooks, on the other hand, will grow more slowly than other types of cooks. Their employment will not keep pace with the rapid growth in the educational and health services industries—where their employment is concentrated. As many high schools and hospitals try to make “institutional food” more attractive to students, staff, visitors, and patients, they increasingly contract out their food services. Many of the contracted companies emphasize fast food and employ short-order and fast-food cooks, instead of institutional and cafeteria cooks, reducing the demand for these workers.

Earnings

Wages of chefs, cooks, and other kitchen workers depend greatly on the part of the country and the type of establishment in which they are employed. Wages usually are highest in elegant restaurants and hotels, where many executive chefs are employed.

Median hourly earnings of restaurant cooks were \$7.81 in 1998, with most earning between \$6.38 and \$9.53. Cooks in fast-food restaurants and short order cooks had median hourly earnings of \$6.12, with most earning between \$5.69 and \$7.38. Median hourly earnings of bread and pastry bakers were \$8.17; most earned between \$6.57 and \$10.36. Median hourly earnings in the industries employing the largest number of food preparation workers in 1997 were:

Hospitals	\$7.55
Grocery stores	7.21
Elementary and secondary schools	7.16
Nursing and personal care facilities	6.92
Eating and drinking places	5.87

Some employers provide employees with uniforms and free meals, but Federal law permits employers to deduct from their employees’ wages the cost or fair value of any meals or lodging provided, and some employers do so. Chefs, cooks, and other kitchen workers who work full time often receive typical benefits, but part-time workers usually do not.

In some large hotels and restaurants, kitchen workers belong to unions. The principal unions are the Hotel Employees and Restaurant Employees International Union and the Service Employees International Union.

Related Occupations

Workers who perform tasks similar to those of chefs, cooks, and other kitchen workers include butchers and meat cutters, cannery workers, and industrial bakers.

Sources of Additional Information

Information about job opportunities may be obtained from local employers and local offices of the State employment service.

Career information about chefs, cooks, and other kitchen workers, as well as a directory of 2- and 4-year colleges that offer courses or programs that prepare persons for food service careers, is available from:

☛ The National Restaurant Association, 1200 17th St. NW., Washington, DC 20036-3097.

For information on the American Culinary Federation’s apprenticeship and certification programs for cooks, as well as a list of accredited culinary programs, send a self addressed, stamped envelope to:

☛ American Culinary Federation, P.O. Box 3466, St. Augustine, FL 32085.

For general information on hospitality careers, write to:

☛ Council on Hotel, Restaurant, and Institutional Education, 1200 17th St. NW., Washington, DC 20036-3097.

Food and Beverage Service Occupations

(O*NET 65002, 65005, 65008A, 65008B, 65011, 65014, 65017, 65041, 65099A, and 65099B)

Significant Points

- Most jobs are part time and many opportunities exist for young people—nearly 2 out of 3 food counter and fountain workers are 16-19 years old.
- Job openings are expected to be abundant through 2008, reflecting substantial turnover.
- Tips comprise a major portion of earnings; consequently, keen competition is expected for bartender, waiter and waitress, and other jobs in popular restaurants and fine dining establishments where potential earnings from tips are greatest.

Nature of the Work

Whether they work in small, informal diners or large, elegant restaurants, all food and beverage service workers aim to help customers have a positive dining experience in their establishments. These workers are responsible for greeting customers, taking food and drink orders, serving food, cleaning up after patrons, and preparing tables and dining areas. All of these duties require a high quality of services customers will return.

The largest group of these workers, *waiters* and *waitresses*, take customers’ orders, serve food and beverages, prepare itemized checks, and sometimes accept payments. Their specific duties vary considerably, depending on the establishment where they work. In coffee shops, they are expected to provide fast and efficient, yet courteous service. In fine restaurants, where gourmet meals are accompanied by attentive formal service, waiters and waitresses serve meals at a more leisurely pace and offer more personal service to patrons. For example, servers may recommend a certain wine as a complement to a particular entree, explain how various items on the menu are prepared, or complete preparations on a salad or other special dishes at table side. Additionally, waiters and waitresses may check the identification of patrons to ensure they meet the minimum age requirement for the purchase of alcohol and tobacco products.

Depending on the type of restaurant, waiters and waitresses may perform additional duties usually associated with other food and beverage service occupations. These tasks may include escorting guests to tables, serving customers seated at counters, setting up and clearing tables, or operating a cash register. However, formal restaurants frequently hire other staff to perform these duties, allowing their waiters and waitresses to concentrate on customer service.

Bartenders fill drink orders that waiters and waitresses take from customers. They prepare standard mixed drinks and, occasionally, are asked to mix drinks to suit a customer’s taste. Most bartenders know dozens of drink recipes and are able to mix drinks accurately, quickly, and without waste, even during the busiest periods. Besides mixing and serving drinks, bartenders collect payment, operate the cash register, clean up after customers leave, and often serve food to